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## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

02-061731

(43) Date of publication of application: 01.03.1990

(51)Int.CI.

G06F 11/28 G06F 11/22

(21)Application number : **63-213974** 

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LTD

(22)Date of filing:

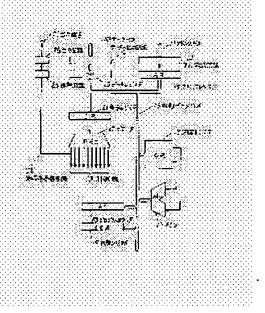
29.08.1988

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#### (54) MICROPROCESSOR

### (57)Abstract:

PURPOSE: To easily trace instructions on the outside of a processor to reduce the capacity of a trace memory by adding a means which sends a specific output to the external synchronously with sending of an instruction fetch address after execution of a branch instruction. CONSTITUTION: When a branch instruction is read out from a main memory and is stored in an instruction register 21, a microprocessor refers to the value in a state register 19 to discriminate whether the next instruction should be fetched from the address indicated by a program counter 20 which is preliminarily increased by one or from the branch address indicated by the branch instruction. Simultaneously, the branch instruction signal from a decoder 22 is held in a holding



circuit 25 through a branch instruction signal line 24. Logical '1' to the address from which the microprocessor first fetches an instruction after execution of the branch instruction is outputted to an output terminal 27. This output signal is used to successively store the address in the trace memory.

#### **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

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[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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